

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-22 (cancelled).

Claim 23 (currently amended): An air separation apparatus comprising:

- i)a) at least one ~~column~~ column;
- ii)b) at least one heat exchanger which further comprises:
 - a)1) at least two stacked dividing plates with a roughly uniform thickness ~~(e)~~(e');
 - b)2) at least one passage between the plates; and
 - c)3) at least one fin in a first one of the at least one passage wherein the ratio of the minimum thickness (e') of the each said fin to the thickness of each said dividing plate (e) is greater than about ~~0.80~~0.8;
- iii)c) means for sending a liquid containing more than 60% mol. oxygen to the heat exchanger; and
- iv)d) means for removing ~~vaperised~~ vaporized liquid containing more than 60% mol. oxygen from the heat exchanger.

Claim 24 (currently amended): The apparatus of Claim 23 wherein the ~~the~~ ratio of the minimum thickness (e') of the each said fin to the thickness of each said dividing plate (e) is greater than about 1.

Claim 25 (currently amended): The apparatus of Claim 24 wherein the ~~the~~ ratio of the minimum thickness (e') of the each said fin to the thickness of each said dividing plate (e) is greater than about 1.5.

Claim 26 (currently amended): The apparatus of Claim 25 wherein the ~~the~~ ratio of the minimum thickness (e') of the each said fin to the thickness of each said dividing plate (e) is greater than about 2.

Claim 27 (previously presented): The apparatus of Claim 23 wherein the thickness of each of the dividing plates is between 0.6 and 2 mm.

Claim 28 (previously presented): The apparatus of Claim 23 comprising two columns connected thermally to one another via the exchanger.

Claim 29 (previously presented): The apparatus of Claim 23 wherein the fins are made of aluminum.

Claim 30 (previously presented): The apparatus of Claim 23 where the column is a double column.

Claim 31 (currently amended): A process for separating air in a plant including a column and at least one heat exchanger which further comprises:

- a) at least two stacked dividing plates with a roughly uniform thickness ~~(e)~~(e);
- b) at least one passage between the plates; and
- c) at least one fin in a first passage wherein the ratio of the minimum thickness (e') of the each said fin to the thickness of each said dividing plate (e) is greater than about 0.8 comprising the steps of separating air in the column, sending a liquid containing more than 60% mol. oxygen from the column to the heat exchanger and removing ~~vaporised~~ vaporized liquid containing more than 60% mol. oxygen from the heat exchanger.